Catalytic asymmetric synthesis of butenolides and γ-butyrolactones

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Stellingen

Behorende bij het proefschrift

Catalytic Asymmetric Synthesis of Butenolides and γ-Butyrolactones

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1. Careful handling is necessary while dealing with volatile γ-butyrolactone compounds.
2. The enantioselective construction of a quaternary carbon center substituted with four distinct carbon-centered groups is one of the most difficult challenges in organic synthesis.
3. The most efficient method developed by Aggarwal and co-workers demonstrates the versatility of tert-alkyl boronates as reagents for the enantioselective construction of quaternary carbon centers. R. P. Sonawane, V. Jheengut, C. Rabalakos, R. Larouche-Gauthier, H. K. Scott, V. K. Aggarwal, Angew. Chem. Int. Ed. 2011, 50, 3760-3763.
4. "Working weekends. Leaving at midnight. Friday evening meetings. Does science come out the winner?" Nature, 2011, 477, 20-22. Working all the day long is not the only way. A healthy work–life balance can enhance research.
5. The reactivity of 2-trimethylsilyloxyfuran in the palladium-catalyzed allylic substitutions depends on the choice of palladium catalysts as well as the additives.
6. Attendance to academic conferences is the key to mingle with members of the scientific community and an essential opportunity to hear about the latest update of scientific research.
7. It's difficult to obtain enantiopure compounds with 99% ee in the field of asymmetric catalysis. It's even more difficult to estimate when I could bring a girl in front of my grandma.
8. "All rivers run into sea, tolerance is a great." It is coming from "The Book of History", which was written in 2200 years ago. (海纳百川, 有容乃大, 出自《尚书》) It's important for education to give learners opportunity and competences to reflect and share their point of view and role within a global, interconnected society.